

REMARKS

Reconsideration of the application is respectfully requested.

The following addresses the issues in the order in which they have been raised in the Final Office Action.

Rejection Under 37 U.S.C. § 112

Claim 2 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite with respect to the *structural support of a building*. Claim 2 has been corrected here to indicate that *the structure is a building and the pulley is permanently attached to a structural support of the building*. No new matter has been added.

Rejections Under 35 U.S.C. § 102

Claims 1, 9, 44 and 45 stand rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 640,099 to Cotter (“Cotter”). Regarding claims 44 and 45, these have been canceled, so their rejection is now moot. Applicant respectfully disagrees with the rejection, for example with respect to claim 1, because Cotter only discloses a fire escape apparatus for lowering people from the windows of various floors of a building. A windlass located on the ground has an endless rope that is passed around it and over a pulley at the top of a ladder. Means for applying friction to the windlass **to operate it as a brake** and govern the speed of the rope as the people are lowered by the rope, is provided. Cotter does not teach or suggest a mechanism that is designed to raise a load that is attached to the rope. Accordingly, Cotter does not anticipate Applicant’s claim 1 prior to this amendment.

In addition, Applicant has amended claim 1 to add further features that are also believed to be not anticipated or obvious in view of the prior art, where such features have been added without introducing new matter. First, in Applicant’s system of claim 1, *the pulley is permanently attached to the non-portable structure*. In Cotter, the portable fire escape apparatus is to be carried upon a truck or other vehicle. It includes a ladder and a pulley carried by the upper end of the ladder. This ladder is not taught or suggested to be a *non-portable structure*, as it and the windlass are to be carried upon a truck or other vehicle to be quickly placed in position for use. Cotter, col. 1, lines 19-40.

Furthermore, Applicant's claim 1 has been amended to recite *a movable pulley around which the loop is installed. This moveable pulley is located in the area next to the base and is designed to be moved relative to the traction winch and the pulley that is permanently attached to the non-portable structure, to either increase tension in the loop as installed so that the load suspended by the loop moves away from the side of the structure, or decrease tension in the loop so that the suspended load moves towards the side of the structure.* Cotter does not concern itself with moving the suspended people towards or away from the side of the structure as part of the rescue operation. Thus, for these additional reasons, claim 1 is neither anticipated nor obvious in view of Cotter.

Claim Rejections Under 35 U.S.C. § 103

Claims 2 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cotter in view of U.S. Patent No. 411,281 to Jacobs ("Jacobs") or in view of U.S. Patent No. 4,512,438 to Vilchek ("Vilchek"). Applicant respectfully disagrees with the rejection.

As to claim 28, prior to the entry of this amendment, *a system for raising firefighters and equipment to and evacuating people from an upper floor of a multi-story building is recited. The building has a first pulley mounted on the roof or an upper level of it. A bi-directional traction winch disposed at the base of the building has a closed loop of cable connected around it and the pulley. When the traction winch is activated in the first direction, a container attached to the loop of cable travels to the upper floor, and when the traction winch is activated in an opposite direction, the container travels down to the base.* This is not taught nor suggested by the combination of Cotter and Vilchek.

First, as explained above, Cotter shows a fire escape apparatus in which a windlass is operated as a brake, for lowering persons that are attached to a rope, from an upper floor of a building. The system is not designed or contemplated to **raise** any attached loads. Vilchek is similar in that it only describes an escape mechanism for lowering persons down a building, not for raising equipment or personnel to the upper floors. In Vilchek, a hydraulic speed control system is provided on the ground that limits the speed of a cable during descent. Moreover, note how a clamp 60 must be available in each floor of the building. This clamp is designed to bite the cable and then

be held onto by the evacuees while they quickly drop out of the building under a controlled descent. There is no reason for modifying such a system by, for example, replacing the brake mechanism with a traction winch as it is recited in Applicant's claim 28, that is operable for both raising and lowering a load that is attached to the cable.

It is noted that at page 2 of the Office Action, the contention is that it would have been obvious to permanently attach the pulley of Cotter to a roof of the building, as taught by either Jacobs or Vilchek, to enable the rescue of people at a location near the roof of a building. This is an improper finding that appears to impermissibly use hindsight, because first, there is absolutely no need to modify the basic mechanism of Cotter in order to reach the roof. One of ordinary skill in the art would simply select a longer ladder that can reach near the roof of the building. The teachings of Jacobs or Vilchek would significantly increase the cost of operation of the simple fire escape mechanism described in Cotter. Accordingly, reconsideration and withdrawal of the obviousness rejection of claim 28 is respectfully requested.

Claim 28 is also rejected as being obvious over Cotter, this time in view of U.S. Patent No. 356,436 to Anderson ("Anderson"). The contention is that Cotter shows the claimed system with the exception of the pulley being fixed near an upper level of a building. Apart from finding that the rejection is improper because Cotter actually does not teach or suggest a *bi-directional traction winch*, the Office Action finds that Anderson shows a pulley attached to an upper level of a building, and that it would have been obvious to move the pulley of Cotter from the ladder to the roof of the building (as suggested by Anderson) to enable the rescue of people that are at upper levels of the building. Applicant, however, respectfully disagrees, because first, moving the pulley from the ladder to the roof of the building would significantly change how the mechanism in Cotter would operate. If one of ordinary skill in the art of Cotter wanted to rescue people that are located near an upper level of a building, the suggested solution would have been to select a taller ladder that would have reached the upper floor, not modifying the Cotter apparatus by deciding that the pulley should be permanently attached to the building as opposed to the ladder. Therefore, Applicant respectfully requests reconsideration and withdrawal of the rejection in view of Cotter and Anderson.

Next, claim 27 stands rejected as being obvious over Cotter in view of U.S. Patent No. 6,435,595 to Chenoweth (“Chenoweth”). The focus in this rejection is on how it would have been obvious to modify the rescue apparatus of Cotter to enable adjustment of the tension in the endless rope. However, Cotter already teaches a mechanism for adjusting the tension in the endless belt 4 (namely, a fork 9, the lower end of which is provided with teeth 10 that are adapted to cooperate with similarly-shaped teeth 11 that are formed on a movable key 12, which slides in an opening 13 formed in the side of the pedestal 7). There is no reason why one of ordinary skill in the art would add a movable pulley system, such as the one in Chenoweth, when a much more efficient and cheaper solution was already present in Cotter.

Furthermore, Chenoweth is directed to a retractable cover for an open-top container, such as a trailer or truck bed, whereas Applicant’s claim 27 recites a system for reaching an upper level of a non-portable structure wherein a movable pulley is designed to move so as to increase tension in the loop as installed so that a load, that is suspended by the loop, moves away from or towards the structure as the tension is increased or decreased. This type of solution is not suggested by the problems addressed in Chenoweth, which focus on maintaining a cable-operated cover tightly against an open-top container. Accordingly, it would not have been obvious to consider adapting a movable pulley arrangement as in Chenoweth, for use in the hoisting system of Applicant’s claim 27 to adjust the distance between a suspended load and the side of a structure.

As to claim 29, the rejection of this claim is now moot as the claim has been canceled.

The claim amendments here also add the following features to Applicant’s claimed system and methodology, namely that the pulley is *permanently* attached to the non-portable structure (e.g., the building), and that the traction winch is *breech loadable*. The pulley being *permanently* attached or located on the non-portable structure is in contrast to the system described in U.S. Patent No. 276,090 to Sperry, which has been relied upon in the latest Office Action in the child application, Serial no. 11/185,518. In Sperry, the relevant pulley is not permanently attached to the building, but rather thrown from the ground as part of deploying the emergency rescue system.

In addition, none of the prior art references teach or suggest the use of a *breech loadable traction winch* as recited in Applicant's claims. In the outstanding Office Action of the child application, the Examiner argues that it would have been obvious to modify the system of Sperry into one that has a traction winch with a cable portion that is looped thereon, as allegedly taught by Cotter. Again, Applicant respectfully points out that Cotter does not teach or suggest any traction winch, much less a breech loadable traction winch. Cotter only shows a brake mechanism to facilitate the lowering of evacuees suspended by the endless rope.

The Examiner also argues that it would have been obvious to one of ordinary skill in the art to substitute one known equivalent for another for their known advantages, pointing to conventional traction winches and their known advantages, to replace the brake of Cotter with a traction winch. However, putting aside for the moment whether a breech loadable traction winch is equivalent to a friction brake (Applicant's contention is that they are not), a conventional traction winch used in the field of raising equipment using a cable on the outside of a structure (e.g., window washing equipment) would **rise together with the equipment**. In other words, a conventional traction winch used in lifting applications rises with the platform that is being lifted, instead of remaining located at the base of the structure. This would not teach or suggest to one of ordinary skill in the art that a system be designed as recited in Applicant's claims in which a breech loadable traction winch is located in the area next to the base of a structure next to which an attached load is being lifted by the winch. Accordingly, it would not have been obvious to one of ordinary skill in the art of Sperry to replace the twin items of a drum or hoisting winch S that is used to draw up the ladder or basket and a second winch that draws the basket away from the building, where such winches are located on the ground next to the building, with a single breech loadable traction winch around which a hoisting cable is looped and closed.

Any dependent claims not mentioned above are submitted as not being anticipated or obvious, for at least the same reasons given above in support of their base claims.

It should be noted that not all of the assertions made in the Office Action, particularly those with respect to the dependent claims, have been addressed here, in the interest of conciseness. Applicants reserve the right to challenge any of the assertions made in the Office Action by the Examiner, with respect to the relied upon art references and how they would relate to Applicants' claim language.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance and such action is earnestly solicited at the earliest possible date.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,

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